WE CLAIM:

1. A method of producing vegetable powder, comprising:

contacting millable vegetable with steam at about 95 °C to about 130 °C for about 3 to about 12 min;

milling the millable vegetable, milling comprising:

contacting the vegetable with air previously passed through a cooling apparatus during milling,

contacting the vegetable with air previously passed through a drying apparatus during milling, or

contacting the vegetable during milling with air previously passed through a cooling apparatus and a drying apparatus;

simultaneously with milling, classifying the milled vegetable, classifying comprising:

contacting the vegetable with air previously passed through a cooling apparatus during classifying,

contacting the vegetable with air from a drying apparatus during classifying, or

contacting the vegetable during classifying with air previously passed through a cooling apparatus and a drying apparatus; and

producing vegetable powder of which 70% has a particle size less than 20 microns.

2. The method of claim 1, wherein the millable vegetable comprises a hull; and the method further comprises:

dehulling the millable vegetable, dehulling comprising:

dehulling vegetable having a mixture of sizes;

gently drying the vegetable and dehulling the gently dried vegetable;

dehulling at ambient temperature; or

a combination thereof.

3. The method of claim 1, comprising contacting millable vegetable with steam at about 105 °C to about 120 °C.

4. The method of claim 1, comprising contacting millable vegetable with steam for about 4 min to about 8 min.

5. The method of claim 1, wherein the air previously passed through a cooling apparatus comprises air at temperature of about 20 °F to about 60 °F.

6. The method of claim 1, wherein the millable vegetable comprises legume, grain, or mixture thereof.

7. The method of claim 6, wherein the millable vegetable comprises legume seed, grain seed, or mixture thereof.

8. The method of claim 6, wherein the legume comprises black bean, pinto bean, red bean, broad bean, lentil, soybean, pea, or mixture thereof.

9. The method of claim 6, wherein the legume comprises whole legume, legume germ, legume cotyledon, or mixture thereof.

10. The method of claim 1, wherein the vegetable comprises soybean.

11. The method of claim 1, wherein 80% of the vegetable powder has a particle size of less than about 20 μm.

12. A method of producing vegetable powder, comprising:

contacting millable vegetable with steam at about 95 °C to about 130 °C for about 3 to about 12 min;

milling the millable vegetable; and

producing vegetable powder of which 70% has a particle size less than 20 microns.

13. A method of producing vegetable powder, comprising:

milling millable vegetable, milling comprising:

contacting the vegetable with air previously passed through a cooling apparatus during milling,

contacting the vegetable with air previously passed through a drying apparatus during milling, or

a combination thereof; and

producing vegetable powder of which 70% has a particle size less than 20 microns.

14. A method of producing vegetable powder, comprising:

milling millable vegetable;

simultaneously with milling, classifying the milled vegetable, classifying comprising:

contacting the vegetable with air previously passed through a cooling apparatus during classifying,

contacting the vegetable with air from a drying apparatus during classifying, or a combination thereof; and

producing vegetable powder of which 70% has a particle size less than 20 microns.

15. A method of producing vegetable powder, comprising:

dehulling the millable vegetable, dehulling comprising:

dehulling vegetable having a mixture of sizes;

gently drying the vegetable and dehulling the gently dried vegetable;

dehulling at ambient temperature; or

a combination thereof; and

producing vegetable powder of which 70% has a particle size less than 20 microns.

16. A powder of a millable vegetable, wherein:

aqueous homogenate of the powder has flavor rank of at least about 7, indicating flavor of slightly beany flavor and little nutty flavor;

the flavor rank based on flavor scale on which 1 is the lowest rank and indicates green beany flavor and 10 is the highest rank and indicates fresh and pleasant flavor.

17. The vegetable powder of claim 16, wherein the aqueous homogenate of the powder has flavor rank of 8, indicating good, nutty, clean soymilk flavor.

18. The vegetable powder of claim 16, wherein

the aqueous homogenate of the powder has off taste rank of less than or equal to about 3, indicating off taste of slightly oxidized, slight cardboard, or somewhat green off taste;

the off taste rank based on off taste scale on which 1 indicates the lowest amount of off taste and no rancid taste and 10 indicates the highest amount of off taste and maximum rancidity.

19. The vegetable powder of claim 18, wherein the aqueous homogenate of the powder has off taste rank of 1.

20. The vegetable powder of claim 16, wherein 80% of the particles of the vegetable powder have particle size of less than about 20 μm.

21. The vegetable powder of claim 16, wherein the millable vegetable comprises legume, grain, or mixture thereof.

22. The vegetable powder of claim 21, wherein the millable vegetable comprises legume seed, grain seed, or mixture thereof.

23. The vegetable powder of claim 21, wherein the legume comprises black bean, pinto bean, red bean, broad bean, lentil, soybean, pea, or mixture thereof.

24. The vegetable powder of claim 21, wherein the legume comprises whole legume, legume germ, legume cotyledon, or mixture thereof.

25. The vegetable powder of claim 16, wherein the vegetable comprises soybean.

26. A powder of a millable vegetable, wherein:

an aqueous homogenate of the powder has off taste rank of less than or equal to about 3, indicating off taste of slightly oxidized, slight cardboard, or somewhat green off taste;

the off taste rank based on off taste scale on which 1 indicates the lowest amount of off taste and no rancid taste and 10 indicates the highest amount of off taste and maximum rancidity.

27. The vegetable powder of claim 48, wherein the aqueous homogenate of the powder has off taste rank of 1.

28. Particles of millable vegetable, wherein at least about 80 % of the particles have a particle size below about 20 μm.

29. The vegetable particles of claim 53, wherein at least about 90 % of the particles have a particle size below about 20 μm.

30. A suspension of powder of millable vegetable, wherein:

aqueous homogenate of the powder has flavor rank of at least about 7, indicating flavor of slightly beany flavor and little nutty flavor;

the flavor rank based on flavor scale on which 1 is the lowest rank and indicates green beany flavor and 10 is the highest rank and indicates fresh and pleasant flavor.

31. A food product comprising as an ingredient powder of millable vegetable, wherein:

aqueous homogenate of the powder has flavor rank of at least about 7, indicating flavor of slightly beany flavor and little nutty flavor;

the flavor rank based on flavor scale on which 1 is the lowest rank and indicates green beany flavor and 10 is the highest rank and indicates fresh and pleasant flavor.

32. The food product of claim 31, wherein the food product is pudding.

33. The food product of claim 31, wherein the food product is yogurt.

34. The food product of claim 31, wherein the food product is cheese sauce.

35. The food product of claim 31, wherein the food product is tofu.

36. A system for producing vegetable powder comprising:

steaming apparatus, milling apparatus, classifying apparatus, vegetable handling apparatus, air cooling apparatus, air drying apparatus, and air handling apparatus;

the vegetable handling apparatus configured to transport the vegetable from the steaming apparatus to the milling apparatus and from the milling apparatus to the classifying apparatus;

the air handling apparatus configured to transport the air from the cooling apparatus and drying apparatus to the milling apparatus, to the vegetable handling apparatus between the milling apparatus and the classifying apparatus, and to the classifying apparatus.

37. The system of claim 36, wherein the steaming apparatus is configured to contact the millable vegetable with steam at a temperature of about 95 °C to about 130 °C.

38. The system of claim 36, wherein the milling apparatus comprises air-swept pin mill.

39. The system of claim 36, wherein the milling apparatus and air handling apparatus are configured to maintain the vegetable powder at a temperature of about 10 to about 45 °C.

40. The system of claim 36, wherein the milling apparatus and classifying apparatus are configured to produce a vegetable powder comprising particles 80% of which have size less than about 20 μm.

41. The system of claim 36, wherein the air cooling apparatus puts out air at a temperature of about 10 to about 70 °F.